

PSES-3 Series

PHASE SHIFTERS

10 to 500 MHz / 0° to 180° / 10% Bandwidth / Voltage Controlled / PC Header Package

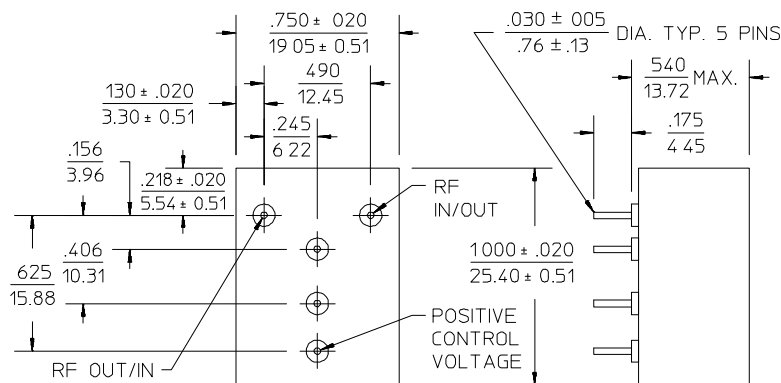


PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, f_0 , MHz	Usable Bandwidth
PSES-3-***B	10 to 500	$f_0 \pm 5\%$

For complete Model Number replace *** with desired center frequency, f_0 , in MHz

Package Outline



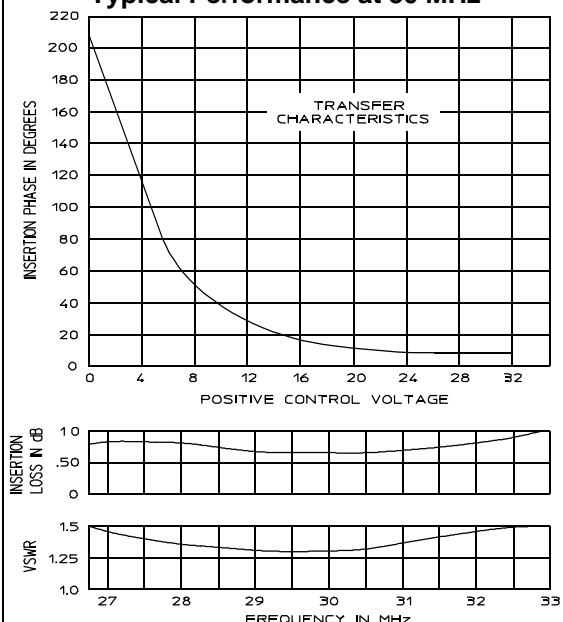
- NOTES:
1. Tolerance on 3 place decimals $\pm .010(.25)$ except as noted.
 2. Dimensions in inches over millimeters.
 3. All unmarked pins are internally ground.

GENERAL SPECIFICATIONS

Phase Shift Range:	180° min. @ f_0
Insertion Loss:	1 dB max.
Impedance:	50 Ω nom.
VSWR:	1.6:1 max.
Phase Stability:	0.1° per °C typ.
Control Voltage:	0.5 to +30V max.*
Input Power:	- 10 dBm max.
Weight, nominal:	0.49 oz (14 g)
Operating Temp:	- 55° to +85°C

*For full control range

Typical Performance at 30 MHz



General Notes:

1. The PSES-3 series of phase shifters provides continuously variable phase shift across a range of 0° to 180° with the application of a control voltage of 0 to +30V.
2. Each phase shifter element employs lumped element quadrature hybrids with matched pairs of varactor tuned LC networks acting as sliding short circuits on the outputs. The electrical length of the short effectively delays the reflected signal which appears at the isolated port of each quadrature hybrid. Similar Phase Shifters are available in a variety of packages, including catalog models in flatpacks and Meri-Pacs.
3. All Merrimac phase shifters are designed for high reliability and can be supplied screened to meet specific military and space applications.

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